

ated in parallel columns, there are more statements for than there are against the proposition "that food does influence the quality of milk." Indeed, I feel myself absolutely in accordance with Mr. Primrose McConnell when he declares in Theorem VI. "You may have no end of variations in the milk, all due to the food."

These variations show themselves in the manufacture of butter, in the manufacture of cheese, and in the sale of new milk. I have not so implicit a belief in chemistry as I have in Euclid. The "Elements" of Euclid have stood the test of more than 2,000 years. If I place a proposition of Euclid before an examinee to be worked out, and his working shows an absolute absurdity, it is not Euclid who is in fault but the false worker. When I have placed before me an analysis of milk from certain cows which have for some considerable time been fed on foods which practice tells me give forth rich milk, my expectation is to find rich milk. If a second analysis be taken after the same cows have been for a considerable period fed on poor food, I expect comparatively poor milk. As I drink milk every morning at breakfast, I take my own taste as a criterion of quality. The milk-pans from which cream is taken for the daily use of my family—offer criteria of quality which only those who have no eyes can fail to recognise. Cows grazed on the pastures of Mid-Staffordshire give milk from which excellent cheese is made. But these same cows grazed on the pastures of certain districts in Leicestershire give milk from which superexcellent cheese is made. I do not believe that a competent analytical chemist can give me identical analyses of these milks yielded by the same cows under similar conditions, the grass of the pastures being only excepted. I do not attack chemistry any more than I attack Euclid when, in the highly improbable event of the analyst giving me identical results, the note made by myself is similar to the note made in Euclid: "Which is absurd."

Let me give the most recent illustrations which have come from my own experience. I am now a milk-seller, and not a cheesemaker or a butter-maker. Under my contract with a London buyer I undertake to supply milk of a much higher standard in fat and other solids than what is called the Somerset House standard. Quite exceptionally in my practice, I ceased to give, during May and June last—in consequence of the boom caused by the corner in American wheat—any other food

than the abundant grass of the pastures. My household milk and cream proclaimed their comparative poverty, of which I was frequently reminded. Then came a reminder from my London buyer of milk, backed up by several analytical statements, which showed that the quality of my milk, although considerably higher than the Somerset House standard, was decidedly lower than that specified in my contract. With the fall of Leiter came the opportunity of again buying my favourite foods of decorticated cotton cake and maize. It is not necessary to add that no damaging analyses have been sent to me since these foods have been again in regular use.

Let me now pass from the personal and somewhat egoistic narrative of my own experience to a wider field of vast importance. It would ill become me to assert that the science of chemistry is not abreast with the practice of experienced dairy farmers. Like Mr. Primrose McConnell, I have my doubts. And it is no laughing matter. On chemical analysis the milk trade, as at present conducted, is dependent for its character. If—and the if is too big for me to swallow—the general result given by chemical analysis puts all cattle foods on the same level as milk producers, I have to say that it is a *reductio ad absurdum*, and that no standard of legality ought to be founded on it. Let me conclude with an anecdote. Some years ago I was sitting by the side of the late Dr. Voelcker during the discussion which followed a paper on silage by the late Mr. Jenkins, Secretary of the Royal Agricultural Society of England. A speaker had been declaring that you might put rough grass, *et hoc genus omne*, into a silo, and that it would come out good food. Waving his arm with an emphatic gesture, which placed my head in danger, Dr. Voelcker burst out with "If you put rubbish into a silo I will stake my professional reputation that it will come out rubbish." It is "bad for the coo" to expect her to give the same sort of milk when badly fed as when well fed.—*English Agricultural Gazette*. T. C. S.

ABOLITION OF SMALL FACTORIES

MR. BARNARD.—If you will allow me, I will repeat for the sixteenth time what I said at the first meeting of our Association. There is a remedy applicable to the evil of these small factories, and a very simple one. I think, Mr. Chair-